REMARKS

Claims 1-21 are all the claims pending in the application.

Claims 3 and 4 have been canceled without prejudice or disclaimer and some of their limitations have been added to claim 1.

Claims 5, 8 and 9 have been amended to change their dependencies.

Claims 1, 10 and 12-13 have been amended to address the Examiner objections to the claims.

Objections to the Specification

The Examiner objects to the specification as containing informalities. Applicants have amended the specification to address the objections. Therefore, the Examiner is requested to withdraw the objections.

Objections to the Drawings

The Examiner objects to the drawings as being informal. Applicants are submitting replacement drawings that address the objections. Therefore, the Examiner is requested to withdraw the objections and approve the drawings.

Prior Art Rejections

The Examiner has rejected claims 1, 3 and 9 under 35 U.S.C. § 102(b) as being anticipated by Akram (U.S. Patent No. 6,424,033). Applicants traverse there rejections as being most since limitations from claim 4 have been added to claim 1.

The Examiner has rejected claims 2, 4-8 and 10-21 under 35 U.S.C. § 103(a) as being unpatentable over Akram in view of Hoffman (U.S. Patent No. 6,737,750). Applicant traverses these rejections because one of skill in the art would not have modified Akram based on Hoffman to arrive at the claimed invention.

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Regarding claim 1, which now includes the limitations of claim 4, the Examiner concedes that Akram fails to disclose or suggest the ball array being a plurality of wires. In order to make up for this deficiency, the Examiner cites to Hoffman. However, Applicants respectfully disagree that one of skill in the art would not have modified Akram based on the disclosure of Hoffman.

Please refer to wire 521 in Fig. 5 of the present specification, for example purposes only, which connects a secondary IC structure to a base structure. This claim feature would not be obvious in view of Akram and Hoffman. If one were to replace the solder ball connections in Akram with wire bonds, he would need to redesign the entire structure. Without the solder balls, support/spacer elements would have to be added between substrate 14 and substrate 114 in order to protect the interior wire bonds 18 from being damaged if they get too close to the lower die 12. The applicant notes that solder balls and wire bonds are two different technologies that are not easily interchangeable.

Furthermore in Hoffman, the wire bonds extend from the second die to the base substrate and not from the secondary IC structure (i.e., substrate portion) to the base substrate. Clearly the wire bonding connections in Hoffman are different from that of the present claimed invention where the third plurality of wires extend from the secondary substrate to the base substrate. Also, there is no suggestion in Hoffman to include a secondary substrate for the upper die nor having a third plurality of wires extending from the secondary substrate to the base substrate. Therefore, one skilled in the art would not be motivated to, or be able to, arrive at the present claimed invention by combining the teachings of Akram and Hoffman.

Regarding claims 10 and 17, they should be allowable for at least the same reasons as claim 1 discussed above.

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Regarding the remaining claims, they should be allowable at least based on their

dependence from claims 1, 10 or 17.

In view of the above, reconsideration and allowance of this application are now believed

to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is

kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any

overpayments to said Deposit Account.

Respectfully submitted,

/ Carl J. Pellegrini cjp /

Carl J. Pellegrini

Registration No. 40,766

SUGHRUE MION, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

WASHINGTON OFFICE 23373

CUSTOMER NUMBER

Date: August 20, 2008

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